

Notice of Independent Review Decision

August 28, 2012

DESCRIPTION OF THE SERVICE OR SERVICES IN DISPUTE:

Repeat MRI left knee

A DESCRIPTION OF THE QUALIFICATIONS FOR EACH PHYSICIAN OR OTHER HEALTH CARE PROVIDER WHO REVIEWED THE DECISION:

Board Certified Orthopedic Surgeon

REVIEW OUTCOME:

Upon independent review, the reviewer finds that the previous adverse determination/adverse determinations should be:

☒ Overturned (Disagree)

Medical documentation supports the medical necessity of the health care services in dispute.

Provide a description of the review outcome that clearly states whether medical necessity exists for each of the health care services in dispute.

INFORMATION PROVIDED TO THE IRO FOR REVIEW:

TDI:

- Utilization reviews (06/18/12, 06/22/12)

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- Office visits (08/13/10 – 07/13/12)
- Therapy notes (08/04/10 – 03/07/11)
- Diagnostic (08/17/10)
- Utilization reviews (06/18/12, 06/22/12)

D.C.

- Office visits (08/13/10 – 07/13/12)
- Therapy notes (08/04/10 – 03/07/11)
- Diagnostic (08/17/10)

PATIENT CLINICAL HISTORY [SUMMARY]:

The patient is a male who injured his left knee on xx/xx/xx, when his left foot slipped in the bus and he twisted his left knee.

2010: From xx/xx/xx, through 2010, the patient attended six sessions of physical therapy (PT) at The, P.A. Modalities included hot/cold packs, ultrasound and electrical stimulation. The patient complained of left knee pain with a pain score of 3/10. He was

sore but reported that his limp was reducing. He stated he had developed an allergic reaction to the neoprene knee brace.

On 2010, the patient was evaluated by D.C. Dr. noted the patient was making good progress with the first few visits of therapy so some rehabilitation had been added. His pain level increased with the rehab, but reduced afterward. On the skin that was beneath the surface of the brace, there was some rash present. Examination revealed tenderness on the medial joint line of the left knee. Dr. recommended continuing therapy and rehab and ordered a magnetic resonance imaging (MRI) to rule out a meniscus tear.

On August 17, 2012, MRI of the left knee was performed at Imaging and Treatment Center. The impression was: (1) Intrasubstance ganglion cyst within the intact anterior cruciate ligament. (2) Small intrasubstance tear involving the medial third of the infrapatellar segment of the patellar tendon. (3) Questionable previous meniscocapsular injury the posterior horn of medial meniscus.

On August 18, 2012, a physical performance evaluation (PPE) was performed. The patient was able to do the task lift but with a moderate degree of pain.

From September 8, 2010, through October 31, 2010, the patient attended 12 sessions of therapy at The P.A., consisting of the previous modalities.

M.D., an orthopedic surgeon, evaluated the patient for left knee pain along the anterior aspect. The patient had been able to fully perform his duties at work secondary to his discomfort. Examination of the left knee showed marked tenderness along the medial third of the patellar tendon and some subcutaneous inflammation which was tender to palpation over the patellar region. The assessment was patellar tendon strain with an intact extensor mechanism. Dr. suggested three weeks of rest to allow for complete resolution of symptoms prior to returning to work. He also recommended icing, Voltaren gel topically, Motrin or Aleve, and continuation of the PT program.

On follow-up, Dr. noted the patellar tendonitis was improving with less complaints of pain. There was less tenderness over the proximal third of the patellar tendon. Dr. suggested two more weeks of limited activities and continuation of PT.

M.D., evaluated the patient for ongoing left knee medial pain with weightbearing, bending, stooping and twisting. Examination revealed painful range of motion (ROM) localizing to the medial joint line with medial joint line tenderness, severe medial pain with a click on McMurray's testing and some mild tenderness on the medial aspect of the distal patellar tendon. Dr. reviewed the MRI scan of August 2010 and diagnosed torn left medial meniscus. He discussed with the patient the options of proceeding with surgery or continuing his current status. A prescription for ibuprofen and Ultram was written and the patient was advised to return with his discussion regarding surgery.

From December 6, 2010, through January 14, 2011, the patient attended 12 sessions of therapy consisting of therapeutic exercises/rehab to the left knee.

2011: Dr. noted that the patient still had trouble with his left knee with a pain level of 4/10. The patient reported that wanted to avoid surgery if possible and hence was encouraged to proceed with additional 12 sessions of rehab.

In a PPE, the patient was able to lift as much as 60 pounds overhead but had increased knee pain with squatting. Dr. decided to place a request for additional rehab and therapy.

From January 31, 2011, through March 7, 2011, the patient attended 11 sessions of therapy for the left knee consisting of therapeutic exercises.

On follow-up, Dr. noted that his ROM had improved as well as ability to squat.

In a functional capacity evaluation (FCE) performed in March, the patient performed a work simulation for 60 minutes with increase in pain. He had decreased flexion of the left knee and weakness in his left quadriceps during testing. Based on the results, Dr. suggested four weeks of work conditioning program (WCP).

In April, Dr. noted the patient had tenderness more on the medial joint than the lateral joint line. Compression with internal and external rotation did not cause increased pain. He had obvious crepitance on squatting followed by increased pain. Dr. again suggested WCP in the near future.

In June, Dr. noted that the patient had seen a designated doctor who did not perform an FCE. After palpating the knee and checking for reflexes, the designated doctor suggested that the patient go back to work without restrictions. The patient returned to work without restrictions and his left knee got worse. Examination revealed medial and posterior medial joint line tenderness. McMurray's procedure was positive. Dr. opined that there was a possibility that a new injury had taken place based on his clinical examination which was markedly different than previous visits. He recommended follow-up in two weeks and obtaining a repeat MRI.

In July, Dr. noted that the patient still had a lot of trouble with stairs and had increased medial knee pain with extension. Dr. suggested that he continue stretching on his own at home and continue his current work status.

2012: On April 18, 2012, the patient returned to Dr. regarding his left knee, reporting pain levels of 5/10. The patient stated that initially when he returned to work he did relatively well but then over the last three months the left knee had slowly been giving him more trouble to the point where it was now relatively constant. On examination, he was tender to pressure along the medial aspect of the infrapatellar tendon where the MRI had suggested a small tear. Considering the location of his pain and prior MRI findings, Dr. suggested referral back to Dr. for orthopedic evaluation.

On May 30, 2012, D.O., examined the patient and noted that he was walking with a limp favoring the left lower extremity. The patient was 5'9" and he weighed 312 pounds. He was only able to squat about 20% which increased left knee pain. He had tenderness to palpation primarily in the anterior medial aspect of the left knee over the patellar tendon more than the joint line. Dr. diagnosed infrapatellar tendon partial tear/sprain, prescribed Cataflam and recommended evaluation by Dr..

On June 13, 2012, Dr. noted that the patient's left knee pain was doing slightly worse than the previous visit. His knee pain interfered with his sleep. He had tenderness in the left patellofemoral tendon inferior to the patella. He was stable on medial and lateral stressing. He did not have any significant swelling and was only able to squat 25%, which was about 50% decrease from the last visit. Based on the changes in his condition and difficulty, Dr. suggested proceeding with a repeat MRI of the left knee.

Per utilization review of June 18, 2012, the request for repeat MRI of the left knee was non-authorized with the following rationale: *"The patient is a male bus driver who injured his left knee when he slipped and fell. MRI of the left knee on August 17, 2010, showed intrasubstance ganglion cyst within the intact ACL; small intrasubstance tear involving the medial third of the infrapatellar segment of the patellar tendon; question previous meniscocapsular injury to the posterior horn of the medial meniscus. The patient most recently was seen on May 21, 2012, regarding his left knee injury. He describes pain level 5/10 in the left knee, which seems to get worse when trying to rise from a seated position. He had a small intrasubstance tear involving the medial third of the infrapatellar tendon and that MRI finding is noted as quite consistent with current pain that the patient is having. He is stable on medial and lateral stressing and has tenderness over the infrapatellar tendon but not necessarily over the joint line medially or laterally. He has 91 degrees of flexion with pain and extension to neutral. He can squat approximately 50%. There is no rationale provided for the proposed repeat MRI of the left knee. Per ODG, repeat MRI may be appropriate if needed to assess knee cartilage repair tissue. There is no indication that this patient has had surgical intervention. There is no evidence of acute trauma to the knee, and no evidence of any significant change in his clinical condition. As such, medical necessity is not established for repeat MRI of the left knee."*

Per utilization review of June 22, 2012, the appeal for repeat MRI of the left knee was non-authorized with the following rationale: *"The claimant is a male who reportedly slipped and fell and injured his left knee. He complains of left knee pain. An MRI of the left knee performed on August 17, 2010, revealed an intrasubstance ganglion cyst within the intact anterior cruciate ligament. A small intrasubstance tear involving the medial third of the infrapatellar segment of the patellar tendon was noted, with question of previous meniscocapsular injury to the posterior horn medial meniscus. The patient most recently was seen on May 21, 2012, regarding his left knee injury. The claimant was seen in follow-up on June 13, 2012, at which time it was noted that his left knee pain is doing a little bit worse since last seen, with pain level 6/10. He has difficulty with daily activities. His knee interferes with sleep. He had an appointment with Dr. but was unable to attend and is awaiting a rescheduled appointment. Evaluation revealed that he has tenderness in the left patellofemoral tendon inferior to the patella. He has some medial joint line tenderness on the posteromedial aspect of the left knee. He is stable on medial and lateral stressing. He does not seem to have any significant swelling, but maybe just a little bit. He is only able to squat 25%, which is about 50% decrease from last visit. No range of motion measurements was provided, and there is no assessment of motor strength, reflexes, or sensation. There is no comprehensive history of the nature and extent of conservative treatment completed to date. Based on the clinical information provided, the appeal request for repeat MRI of left knee is not recommended as medically necessary."*

On July 13, 2012, Dr. noted that six weeks ago, the patient was pushing a wheelchair and the gentlemen he was pushing put his legs down, and it caused a violent stop in the forward progression of the patient's left knee. He was now having pain localized to the medial compartment. The pain was with squatting, kneeling and twisting. On examination he had a fair amount of discomfort on the medial joint line as well as tenderness along the patellar tendon in the medial parapatellar region. Dr. reviewed his x-rays and found no evidence of fracture but some minimal arthritic change in the knee. He assessed possible medial meniscus tear and patellar tendon strain. He suggested an MRI of the knee to further evaluate the extent of injury and to follow-up after the MRI had been performed.

ANALYSIS AND EXPLANATION OF THE DECISION INCLUDE CLINICAL BASIS, FINDINGS, AND CONCLUSIONS USED TO SUPPORT THE DECISION:

After carefully reviewing the medical records provided. I would make the following determination regarding the request for repeat MRI in this setting.

The notes reflect the claimant has had a previous MRI scan from 08/10. The MRI scan although not revealing an obvious tear in the medial meniscus raised the concerns about the possibilities of meniscal capsular junction injury. It also noted a small intrasubstance tear along the medial third of the infrapatellar tendon. Subsequently the claimant went through conservative care for an extended period of time but has continued to have persistent pain. The most recent clinical notes suggest the claimant is now having considerable pain, well confined to the medial aspect of the knee. This is problematic with activities such as squatting and is reflected on examination findings including medial joint line pain as well as pain along the patellar tendon. The recent X-rays have proven to be nondiagnostic.

Although the evidence based literature generally states that repeat imaging studies such as an MRI scan are not typically indicated, they can be of value in patients where previous studies have proven to be ambiguous and where there continues to be persistent pain that could require further intervention. Furthermore the evidence based measures supports repeat imaging studies in the face of clinical change. I would submit that the records in this case at the very least document persistent medial joint line complaints in this claimant. The previous MRI scan while nondiagnostic certainly raises suspicions about the possibilities of meniscal pathology. I would submit that most orthopedic surgeons before recommending surgery in this setting would suggest an updated imaging study. While it may not change the absolute indications for surgery it may prove helpful in setting expectations for surgical outcomes. In this case it would appear that at this juncture based on the claimant's persistent pain and increasing symptoms of late that there has not only been a clinical change but persistent symptoms that would suggest a repeat MRI scan would prove valuable as such the request should be considered reasonable and medically necessary.

IRO REVIEWER REPORT TEMPLATE -WC

A DESCRIPTION AND THE SOURCE OF THE SCREENING CRITERIA OR OTHER CLINICAL BASIS USED TO MAKE THE DECISION:

☒ **ODG- OFFICIAL DISABILITY GUIDELINES & TREATMENT GUIDELINES**

Official Disability Guidelines Treatment in Worker's Comp, 17th edition, 2012 Updates

Knee Chapter

MRI/repeat MRI

Recommended as indicated below. Soft-tissue injuries (meniscal, chondral surface injuries, and ligamentous disruption) are best evaluated by MRI. ([ACR, 2001](#)) See also [ACR Appropriateness Criteria](#)TM. Diagnostic performance of MR imaging of the menisci and cruciate ligaments of the knee is different according to lesion type and is influenced by various study design characteristics. Higher magnetic field strength modestly improves diagnostic performance, but a significant effect was demonstrated only for anterior cruciate ligament tears. ([Pavlov, 2000](#)) ([Oei, 2003](#)) A systematic review of prospective cohort studies comparing MRI and clinical examination to arthroscopy to diagnose meniscus tears concluded that MRI is useful, but should be reserved for situations in which further information is required for a diagnosis, and indications for arthroscopy should be therapeutic, not diagnostic in nature. ([Ryzewicz, 2007](#)) This study concluded

that, in patients with nonacute knee symptoms who are highly suspected clinically of having intraarticular knee abnormality, magnetic resonance imaging should be performed to exclude the need for arthroscopy. ([Vincken, 2007](#)) In most cases, diagnosing osteoarthritis with an MRI is both unnecessary and costly. Although weight-bearing X-rays are sufficient to diagnose osteoarthritis of the knee, referring physicians and some orthopaedic surgeons sometimes use magnetic resonance imaging (MRI) either with or instead of weight bearing X-rays for diagnosis. For total knee arthroplasty (TKA) patients, about 95% to 98% of the time they don't need an MRI. Osteoarthritis patients often expect to be diagnosed with MRIs, and this demand influences MRI use. Average worker's compensation reimbursement is also higher for the knee MRI (\$664) than for the knee X-rays (\$136). ([Goldstein, 2008](#)) Repeat MRIs are recommended if need to assess knee cartilage repair tissue. In determining whether the repair tissue was of good or poor quality, MRI had a sensitivity of 80% and specificity of 82% using arthroscopy as the standard. ([Ramappa, 2007](#)) MRI scans are accurate to diagnose meniscus tears, but MRI is a poor predictor of whether or not the tear can be repaired. Surgeons cannot tell whether the tear will be reparable until the surgery is underway, and it affects recovery because repaired meniscus tears have a more involved recovery compared with surgical removal of the tissue. ([Bernthal, 2010](#)) In this case series, in more than half of patients who had an MRI at the request of their referring physician, the MRI was not necessary. MRI was considered unnecessary if: X-rays alone could establish the diagnosis, patellofemoral pain with a normal ligamentous and meniscal exam, the knee pain resolved before seeing an orthopedic surgeon, or the MRI findings had no effect on treatment outcome. MRI studies were deemed necessary if they were indicated by history and/or physical examination to assess for meniscal, ligamentous, or osteochondral injury or osteonecrosis, or if the patient had an unexpected finding that affected treatment. ([Khanuja, 2011](#)) Routine use of MRI for follow-up of asymptomatic patients following knee arthroplasty is not recommended, but may be appropriate for pain after TKA with a negative radiograph for loosening and low probability of infection. ([Weissman, 2011](#))

Indications for imaging -- MRI (magnetic resonance imaging):

- Acute trauma to the knee, including significant trauma (e.g, motor vehicle accident), or if suspect posterior knee dislocation or ligament or cartilage disruption.
- Nontraumatic knee pain, child or adolescent: nonpatellofemoral symptoms. Initial anteroposterior and lateral radiographs nondiagnostic (demonstrate normal findings or a joint effusion) next study if clinically indicated. If additional study is needed.
- Nontraumatic knee pain, child or adult. Patellofemoral (anterior) symptoms. Initial anteroposterior, lateral, and axial radiographs nondiagnostic (demonstrate normal findings or a joint effusion). If additional imaging is necessary, and if internal derangement is suspected.
- Nontraumatic knee pain, adult. Nontrauma, nontumor, nonlocalized pain. Initial anteroposterior and lateral radiographs nondiagnostic (demonstrate normal findings or a joint effusion). If additional studies are indicated, and if internal derangement is suspected.
- Nontraumatic knee pain, adult - nontrauma, nontumor, nonlocalized pain. Initial anteroposterior and lateral radiographs demonstrate evidence of internal derangement (e.g., Pellegrini Stieda disease, joint compartment widening).
- *Repeat MRIs*: Post-surgical if need to assess knee cartilage repair tissue. ([Ramappa, 2007](#)) Routine use of MRI for follow-up of asymptomatic patients following knee arthroplasty is not recommended. ([Weissman, 2011](#))